

What is claimed is:

1. A process for removing a thermal barrier ceramic coating from a metallic substrate surface of a component comprising:
directing an air jet at the thermal barrier coating on the substrate surface of the component, the jet containing a non-abrasive particulate media and being emitted from a nozzle at a low pressure insufficient to damage the substrate surface but sufficient to remove the thermal barrier ceramic coating.
2. Process of Claim 1 wherein the pressure of the air jet is from about 20 to 100 PSIG.
3. Process of Claim 2 wherein the media has a substantially spherical shape.
4. Process of Claim 3 wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
5. Process of Claim 4 wherein the media is glass beads.
6. Process of Claim 1 wherein the component is a turbine engine component.
7. Process of Claim 6 wherein the turbine engine component is a combustion chamber.
8. A process for removing a thermal barrier ceramic coating from a cooling hole of a metallic turbine engine component comprising:
directing an air jet at the cooling hole of the component, the jet containing non-abrasive particulate media and being emitted from a nozzle at a low pressure insufficient to

damage a metallic surface of the cooling hole but sufficient to remove the thermal barrier ceramic coating.

9. Process of Claim 8 wherein the pressure of the air jet is from about 20 to 100 PSIG.
10. Process of Claim 9 wherein the media has a substantially spherical shape.
11. Process of Claim 10 wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
12. Process of Claim 11 wherein the media is glass beads.
13. Process of Claim 12 wherein the turbine engine component is a combustion chamber.
14. Process of Claim 8 wherein the air jet is directed at the cooling hole toward a surface of the component opposing the surface having the thermal barrier coating.
15. Process of Claim 9 wherein the air jet is directed at the cooling hole at substantially the same angle as the cooling hole.
16. Process of Claim 8 wherein the air jet rounds the metallic edges of the cooling hole.
17. Process of Claim 8 wherein the cooling holes are drilled into the turbine component using a laser drilling process.
18. A process for forming cooling holes on a thermal barrier coated turbine engine component comprising:
drilling cooling holes into the component;
coating a surface of the component containing the cooling holes with a thermal barrier ceramic coating; and

directing an air jet at the cooling hole of the component, the jet containing non-abrasive particulate media and being emitted from a nozzle at a low pressure insufficient to damage a metallic surface of the cooling hole but sufficient to remove the thermal barrier coating.

19. Process of Claim 18 wherein the pressure of the air jet is from about 20 to 100 PSIG.
20. Process of Claim 19 wherein the media has a substantially spherical shape.
21. Process of Claim 20 wherein the spherical media particles have a diameter of from about 0.002 to 0.010 inches.
22. Process of Claim 21 wherein the media is glass beads.
23. Process of Claim 22 wherein the turbine engine component is a combustion chamber.
24. Process of Claim 16 wherein the air jet is directed at the cooling hole toward a surface of the component opposing the surface having the thermal barrier coating.
25. Process of Claim 18 wherein the air jet is directed at the cooling hole at substantially the same angle as the cooling hole.
26. Process of Claim 18 wherein the air jet rounds the metallic edges of the cooling hole.
27. Process of Claim 18 wherein the cooling holes are drilled through the turbine component using a laser drilling process.